

# OBSTRUCTION DATA SHEET

ODS 5064  
MARION MUNICIPAL AIRPORT  
MARION, INDIANA

DIGITIZED FROM

OC 5064  
SURVEYED JUNE 1988  
7TH EDITION



PREPARED AND DISTRIBUTED BY  
THE NATIONAL OCEAN SERVICE  
U.S. DEPARTMENT OF COMMERCE  
FOR THE FEDERAL AVIATION ADMINISTRATION

## OBSTRUCTION DATA SHEET

The Obstruction Data Sheet (ODS) provides digital obstruction and runway data for use in aircraft arrival and departure planning. This information has been obtained using field survey and photogrammetric methods by the Photogrammetry Branch of the National Ocean Service in accordance with Federal Aviation Regulations Part 77 (FAR-77), "Objects Affecting Navigable Airspace" and FAA Nr. 405, "Specifications - Airport Obstruction Chart and Related Products."

The ODS is a derivative of the Airport Obstruction Chart (OC). The source OC is indicated on the ODS cover. All objects, both obstructing and nonobstructing, that carry an elevation on the OC are listed in the ODS. The ODS (and OC) depict a representation of objects that existed at the time of the OC field survey.

ODS information is arranged as follows:

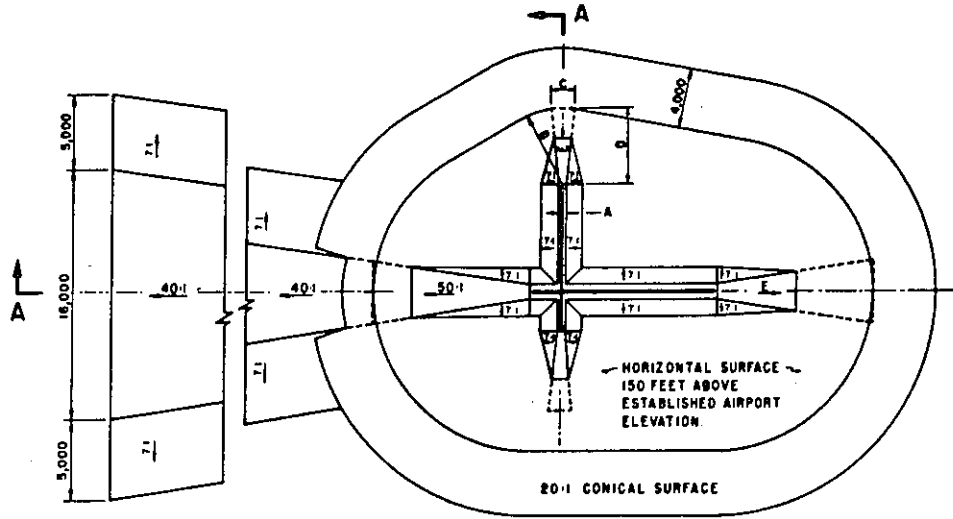
1. Objects located in FAR-77 approach (including supplemental approaches if present) or primary areas are listed with the associated runway (reference runway). For example, all objects in the Runway 9R approach or primary are listed with Runway 9R. Distances to these objects are computed from both the physical end and threshold of Runway 9R. Objects in the Runway 27L approach or primary are listed with Runway 27L. (Objects in the common 9R/27L primary area are listed with both runways.)
2. All objects not included in "1" above are listed with the Airport Reference Point (ARP).
3. Runway configuration and runway lengths, widths, and elevations are presented on the ODS last page.

The FAR-77 imaginary approach surfaces for which the obstruction surveys were performed are coded in the ODS as follows (see footnote 2 on page 3):

A(V) ..... Utility runway - visual approach only  
 A(NP) ..... Utility runway - nonprecision instrument approach  
 B(V) ..... Nonutility runway - visual approach only  
 C ..... Nonutility runway - nonprecision instrument approach with  
 visibility minimums greater than 3/4 mile  
 D ..... Nonutility runway - nonprecision instrument approach with  
 visibility minimums as low as 3/4 mile  
 PIR ..... Precision instrument runway  
 SUPLC ... Supplemental C underlying a B(V)

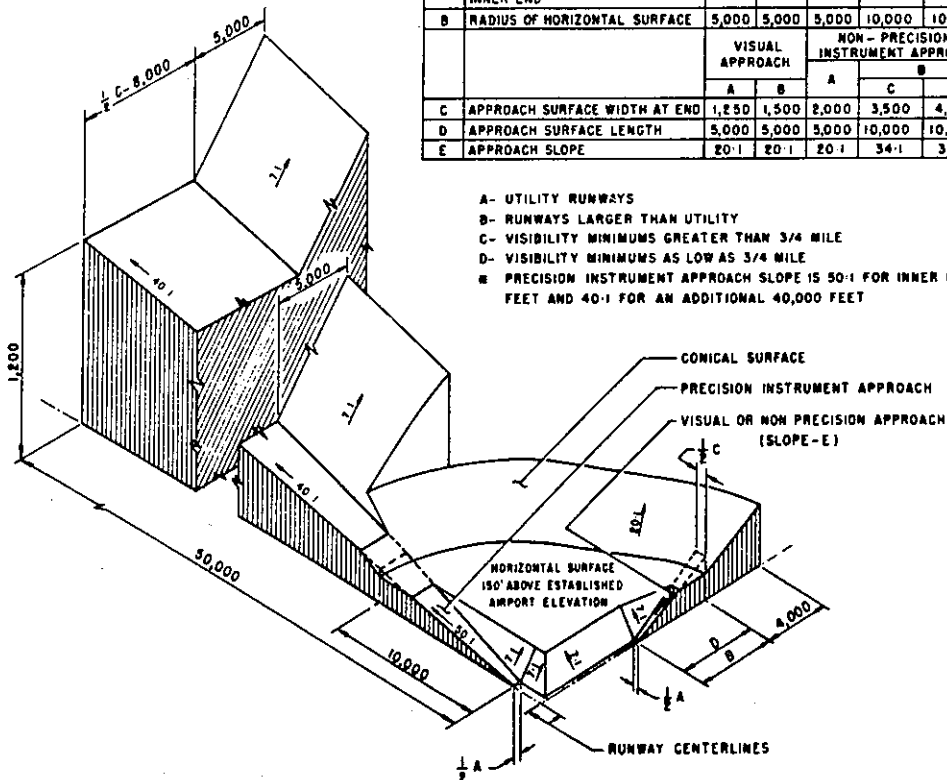
FAR-77 imaginary surface dimensions are defined on page 2 of this report.

Primary surface width is determined by the widest approach at the two approach/primary interfaces for that runway.



DIM	ITEM	DIMENSIONAL STANDARDS (FEET)					
		VISUAL RUNWAY		NON-PRECISION INSTRUMENT RUNWAY			PRECISION INSTRUMENT RUNWAY
		A	B	A	C	D	
A	WIDTH OF PRIMARY SURFACE AND APPROACH SURFACE WIDTH AT INNER END	250	300	500	500	1,000	1,000
B	RADIUS OF HORIZONTAL SURFACE	5,000	5,000	5,000	10,000	10,000	10,000
		VISUAL APPROACH		NON-PRECISION INSTRUMENT APPROACH			PRECISION INSTRUMENT APPROACH
		A	B	A	C	D	
C	APPROACH SURFACE WIDTH AT END	1,250	1,500	2,000	3,500	4,000	16,000
D	APPROACH SURFACE LENGTH	5,000	5,000	5,000	10,000	10,000	#
E	APPROACH SLOPE	20:1	20:1	20:1	34:1	34:1	*

- A- UTILITY RUNWAYS
- B- RUNWAYS LARGER THAN UTILITY
- C- VISIBILITY MINIMUMS GREATER THAN 3/4 MILE
- D- VISIBILITY MINIMUMS AS LOW AS 3/4 MILE
- \* PRECISION INSTRUMENT APPROACH SLOPE IS 50:1 FOR INNER 10,000 FEET AND 40:1 FOR AN ADDITIONAL 40,000 FEET



ISOMETRIC VIEW OF SECTION A-A

FAR-77 CIVIL AIRPORT  
IMAGINARY SURFACES

# ANNOTATION OF ODS DATA FORMAT

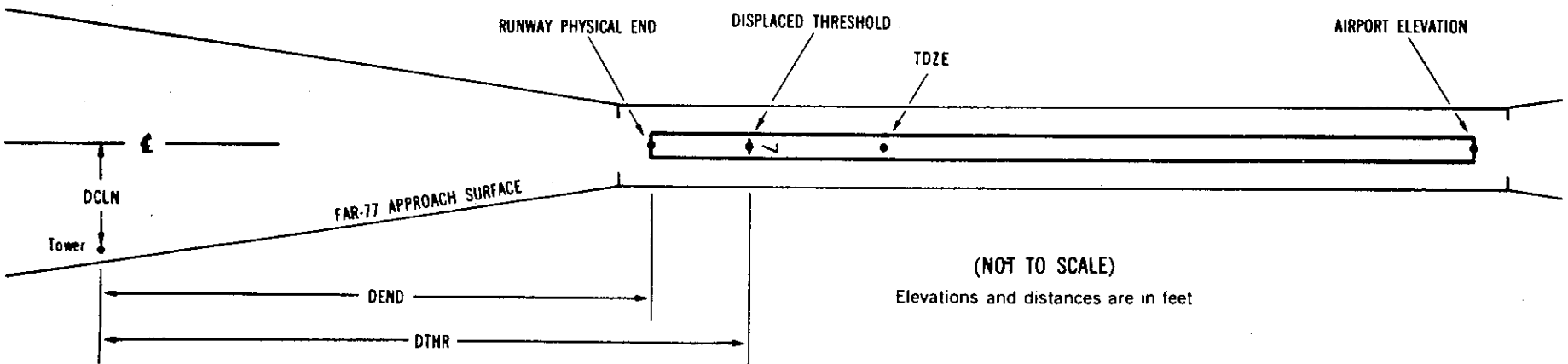
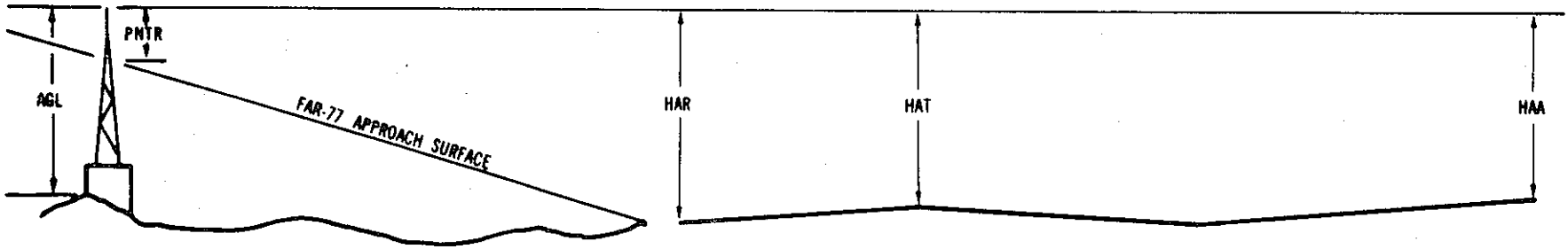
OC XXXX

AIRPORT ELEVATION XXXX

x<sup>1</sup> x<sup>2</sup> XXXX/XXXX<sup>3</sup> XXXXXX.XXX<sup>4</sup> XXXXXXXX.XXX<sup>4</sup> XXXXXXXX<sup>5</sup> XXXX/XXXX<sup>6</sup> XXXXXX.XXX<sup>7</sup> XXXXXXXX.XXX<sup>7</sup>

OBJECT	LAT	LONG	A <sup>8</sup>	ELEV <sup>9</sup>	AGL <sup>10</sup>	HAR <sup>11</sup>	HAT <sup>11</sup>	HAA <sup>11</sup>	DEND <sup>12</sup>	DTHR <sup>12</sup>	DCLN <sup>12</sup>	PNTR <sup>13</sup>
XXXXXXXXXXXX	XXXXXX.XXX	XXXXXXXX.XXX	XX	XXXX	XXXX	XXX	XXX	XXX	XXXXX	XXXXX	XXXX	XXXX
XXXXXXXXXXXX	XXXXXX.XXX	XXXXXXXX.XXX	XX	XXXX	XXXX	XXX	XXX	XXX	XXXXX	XXXXX	XXXX	XXXX

\*\*\*\*\*



(NOT TO SCALE)  
Elevations and distances are in feet

## EXPLANATION OF FOOTNOTES

- <sup>1</sup> Data block identifier. If a runway number is entered (reference runway), this data block will contain data pertinent to the reference runway and to objects in the FAR-77 approach and primary area of the reference runway. If ARP is entered, this data block will contain the ARP position and data relative to all objects not in an FAR-77 approach or primary area.
- <sup>2</sup> For the reference runway, the lowest FAR-77 approach surface for which an obstruction survey was performed. (More than one surface may be surveyed.)
- <sup>3</sup> Reference runway approach physical end elevation/touchdown zone elevation
- <sup>4</sup> Latitude and longitude of reference runway approach physical end
- <sup>5</sup> Reference runway geodetic azimuth reckoned clockwise from south
- <sup>6</sup> Reference runway displaced threshold elevation/touchdown zone elevation
- <sup>7</sup> Latitude and longitude of reference runway displaced threshold
- <sup>8</sup> Accuracy Code:                      Horizontal    Vertical
- |        |        |
|--------|--------|
| 1 = 20 | A = 2  |
| 2 = 40 | B = 5  |
|        | C = 20 |
- <sup>9</sup> Mean Sea Level (MSL) elevation at top of object. This value includes 15 feet added to noninterstate roads, 17 feet added to interstate roads, and 23 feet added to railroad tracks.
- <sup>10</sup> Height above ground level (AGL). AGLs are provided only for those objects appearing on the OC that are equal to, or greater than, 200 feet AGL. AGL accuracy is  $\pm 10$  feet.
- <sup>11</sup> HAA - Height above airport  
 HAR - Height above reference runway approach physical end  
 HAT - Height above reference runway touchdown zone elevation
- <sup>12</sup> DEND - Distance along reference runway centerline from point perpendicular to object to reference runway approach physical end  
 DTHR - Distance along reference runway centerline from point perpendicular to object to reference runway threshold  
 DCLN - Distance left (L) or right (R) of reference runway centerline as observed facing forward in a landing aircraft.
- A negative value for DEND or DTHR indicates object is in primary area on roll-out side of zero distance point.
- <sup>13</sup> PNTR - Penetration of indicated FAR-77 approach or primary surface (see footnote 2).

OC5064

AIRPORT ELEVATION 859

4 PIR 858/858 402906.619N 08541 6.724W 2173453

OBJECT	LAT	LONG	A	ELEV	AGL	HAR	HAT	HAA	DEND	DTHR	DCLN	PNTR
HANGAR	402939.72	0854025.29	1A	872		14	14	13	-4608		494R	19
BUSH	402941.82	0854039.28	1A	880		22	22	21	-4117		493L	26
OL VOR/DME	402935.87	0854045.39	1A	884		26	26	25	-3351		499L	28
WINDSOCK	402933.38	0854043.24	1A	863		5	5	4	-3253		214L	7
TREE	402922.66	0854056.06	1A	895		37	37	36	-1789		337L	38
TREE	402911.63	0854106.11	1A	869		11	11	10	-430		271L	12
TREE	402852.64	0854129.48	1A	891		33	33	32	2193		531L	-7
TREE	402851.05	0854132.28	1A	904		46	46	45	2453		604L	1
TREE	402848.99	0854132.32	1A	907		49	49	48	2620		480L	1

22 C 851/859 402947.339N 0854025.674W 0373519

OBJECT	LAT	LONG	A	ELEV	AGL	HAR	HAT	HAA	DEND	DTHR	DCLN	PNTR
TREE	402911.63	0854106.11	1A	869		18	10	10	-4770		271R	12
TREE	402922.66	0854056.06	1A	895		44	36	36	-3411		337R	38
WINDSOCK	402933.38	0854043.24	1A	863		12	4	4	-1947		214R	7
OL VOR/DME	402935.87	0854045.39	1A	884		33	25	25	-1849		499R	28
BUSH	402941.82	0854039.28	1A	880		29	21	21	-1084		493R	26
HANGAR	402939.72	0854025.29	1A	872		21	13	13	-592		494L	19
HANGAR	402949.68	0854014.62	1A	862		11	3	3	709		532L	-4
TREE	403000.86	0854022.62	1A	894		43	35	35	1228		647R	13
OL LOCALIZER	402957.52	0854015.42	1A	857		6	-2	-2	1300		OR	-26
TREE	402959.41	0854014.21	1A	901		50	42	42	1508		43R	12
TREE	403002.58	0854019.29	1A	902		51	43	43	1523		550R	12
TREE	403000.19	0854004.76	1A	916		65	57	57	2016		487L	12
TREE	402958.93	0854002.10	1A	911		60	52	52	2041		728L	6
TREE	403005.14	0854009.06	1A	912		61	53	53	2210		82R	2
TRANSMISSION TOWER	403041.68	0853938.10	1A	967		116	108	108	6599		442R	-72

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AIRPORT ELEVATION 859

15 A(NP) 858/858 402938.017N 0854054.888W 3302129

OBJECT	LAT	LONG	A	ELEV	AGL	HAR	HAT	HAA	DEND	DTHR	DCLN	PNTR
GROUND	402904.13	0854033.41	1A	853		-5	-5	-6	-3802		254R	3
TREE	402907.06	0854028.46	1A	879		21	21	20	-3733		225L	29
GROUND	402905.90	0854034.73	1A	854		-4	-4	-5	-3596		254R	4
GROUND	402911.98	0854039.16	1A	856		-2	-2	-3	-2891		247R	7
TREE	402919.01	0854037.40	1A	876		18	18	17	-2340		223L	26
TREE	402917.53	0854042.98	1A	870		12	12	11	-2257		225R	19
BUSH	402934.82	0854056.27	1A	863		5	5	4	-229		253R	5
BUSH	402937.35	0854058.00	1A	864		6	6	5	60		242R	6
BUSH	402941.93	0854056.34	1A	867		9	9	8	400		98L	-1
TREE	402943.24	0854104.17	1A	913		55	55	54	814		362R	24
TREE	402948.24	0854108.01	1A	932		74	74	73	1400		369R	14
TRANSMISSION TOWER	403023.09	0854115.61	1A	961		103	103	102	4756		865L	-125

33 A(V) 850/858 402907.136N 0854031.874W 1502144

OBJECT	LAT	LONG	A	ELEV	AGL	HAR	HAT	HAA	DEND	DTHR	DCLN	PNTR
BUSH	402937.35	0854058.00	1A	864		14	6	5	-3656		242L	6
BUSH	402934.82	0854056.27	1A	863		13	5	4	-3367		253L	5
TREE	402917.53	0854042.98	1A	870		20	12	11	-1339		225L	19
TREE	402919.01	0854037.40	1A	876		26	18	17	-1255		223R	26
GROUND	402911.98	0854039.16	1A	856		6	-2	-3	-705		247L	7
GROUND	402905.90	0854034.73	1A	854		4	-4	-5	0		254L	4
TREE	402907.06	0854028.46	1A	879		29	21	20	137		225R	29
GROUND	402904.13	0854033.41	1A	853		3	-5	-6	206		254L	3
BUSH	402904.99	0854030.89	1A	856		6	-2	-3	226		41L	5
TREE	402905.56	0854027.12	1A	887		37	29	28	320		240R	31
TREE	402902.37	0854032.33	1A	901		51	43	42	402		269L	41
TREE	402900.47	0854030.81	1A	929		79	71	70	627		262L	58
TREE	402858.17	0854029.05	1A	915		65	57	56	896		259L	30
TREE	402855.41	0854027.70	1A	900		50	42	41	1191		306L	0

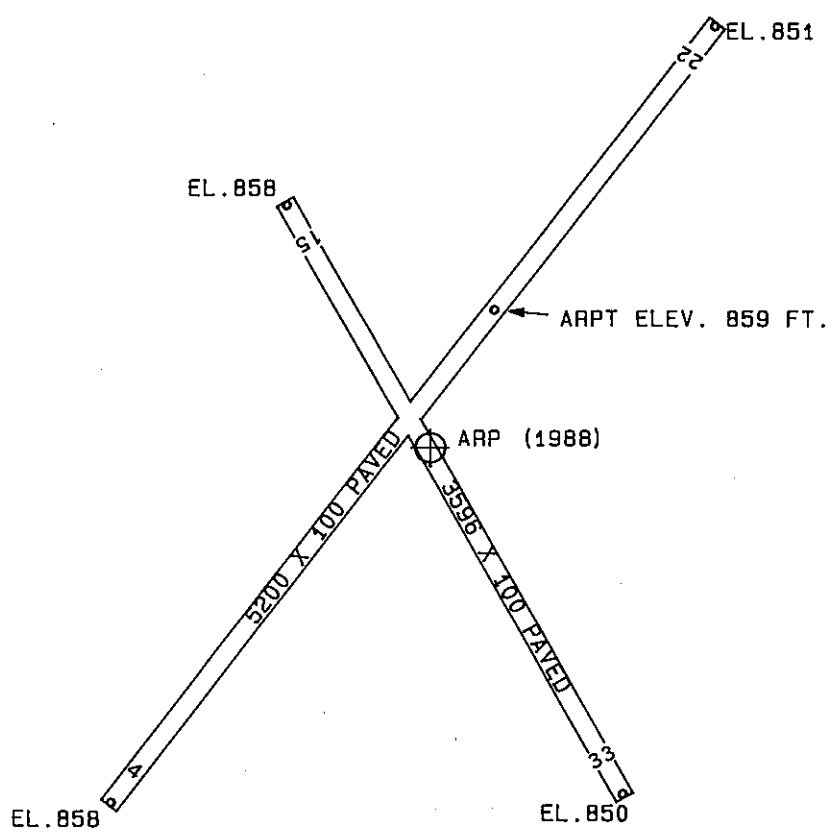
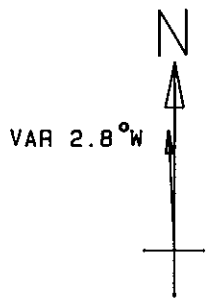
OC5064

AIRPORT ELEVATION 859

ARP 402925.180N 0854045.048W

OBJECT	LAT	LONG	A	ELEV	AGL	HAA	MAG BEARING	DISTANCE
TREE	402925.93	0854056.21	1A	897		38	277 48	865
TREE	402928.39	0854056.11	1A	907		48	293 35	914
TREE	402915.60	0854042.84	1A	922		63	172 50	985
TREE	402931.80	0854055.86	1A	900		41	311 32	1071
ROD ON OL AIRPORT BEACON	402930.58	0854025.65	1A	923		64	72 47	1596
TREE	402912.85	0854031.70	1A	916		57	143 13	1619
ROD ON OL GLIDE SLOPE	402918.34	0854104.71	1A	893		34	248 18	1670
TREE	402912.16	0854030.24	1A	925		66	141 50	1746
POLE	402937.41	0854026.90	1A	893		34	51 22	1871
TREE	402908.53	0854028.83	1A	905		46	146 9	2100
OL HANGAR	402943.37	0854021.04	1A	886		27	48 1	2613
TREE	402950.62	0854039.24	1A	909		50	12 41	2613
TREE	402943.09	0854109.52	1A	946		87	316 35	2620
TREE	402900.68	0854031.99	1A	914		55	160 39	2677
TREE	402901.92	0854020.33	1A	907		48	143 45	3031
TREE	402857.45	0854104.37	1A	911		52	210 49	3179
TREE	402907.51	0854119.90	1A	932		73	239 13	3233
TREE	402955.01	0854029.73	1A	908		49	24 13	3242
WINDSOCK ON HANGAR	402949.67	0854013.27	1A	871		12	47 32	3489
TREE	402950.49	0854011.12	1A	914		55	48 28	3665
TREE	402852.94	0854107.72	1A	936		77	211 2	3703
TREE	403002.88	0854022.44	1A	909		50	27 24	4196
TREE	402857.26	0854129.54	1A	901		42	233 23	4450
TREE	402900.72	0854133.47	1A	949		90	239 19	4486
TREE	403008.46	0854017.38	1A	933		74	28 49	4874
TREE	402823.18	0854125.92	1A	949		90	209 32	7024





TOUCHDOWN ZONE RUNWAY ELEVATION	
4	858
22	859
15	858
33	858

MARION MUNICIPAL AIRPORT  
MARION, INDIANA  
(NOT TO SCALE)